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Trade Policy Monitoring

Iberian Peninsula Biofuels--Prospects for U.S. Corn and Soybean Exports

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Report Highlights: The European Commission (EC) has established lofty goals for renewable fuel use in Europe, but the prospects that U.S. corn or soybeans might be used to produce any of those fuels here on the Iberian Peninsula will likely be very limited. (CM60SH6)

Includes PSD Changes: No
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INTRODUCTION

Directive 2003/30/CE sets a consumption standard of biofuels within Member States at two percent of all transport fuels by the end of 2005, and 5.75 percent during 2010 (the time frame for the analysis in this report). Biofuel production by Member State is not defined, so that production will likely occur where it is most economically feasible under the current legislative framework.

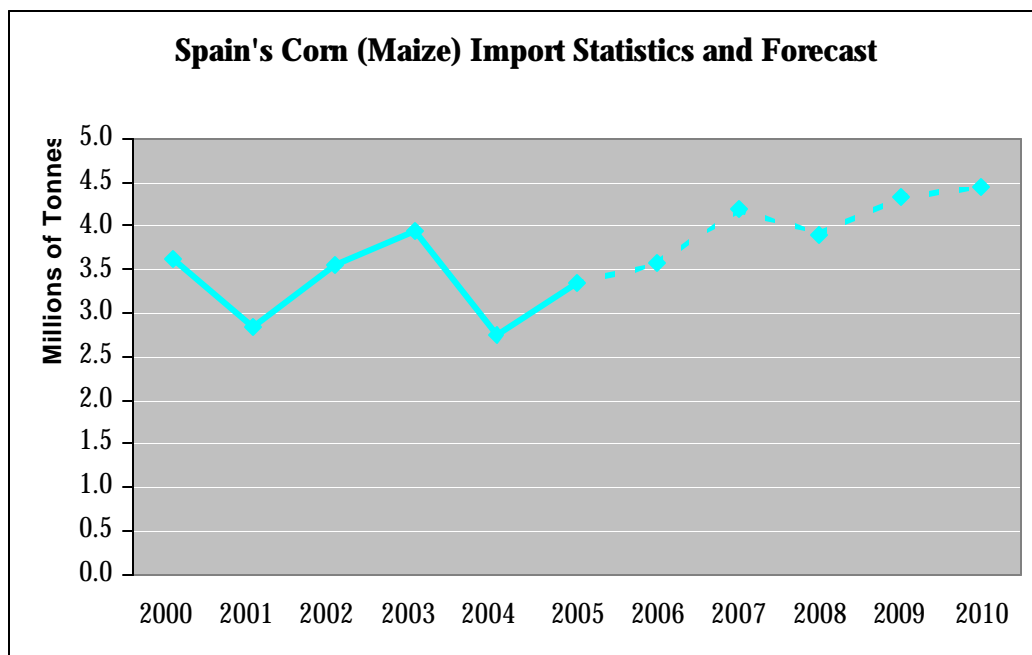
Regarding the legislative framework, our assumption in this report is that the EC will alter it as necessary to achieve the goals established in 2003/30/CE. Oil prices, currently at historic levels, will certainly change over the period in question, as will world and domestic availability and prices for the primary feedstock needed for the production of biofuels. Thus, the current framework may need to be altered within the next two years for the EC to achieve the biofuel use as detailed above.

The Iberian Peninsula (Spain and Portugal) is a producer of cereals and an importer of cereals and soybeans for the compound feed sector, raw material that can also be used in the production of biodiesel and ethanol. As a result, the Iberian Peninsula is and will likely continue to be a producer of biofuels, but only to the extent that such production complements domestic raw material availability and imports of raw materials with their primary application for compound feed production.

Ethanol:

U.S. cereals will not likely become an important feedstock in Iberian Peninsula ethanol production. Spain currently produces ethanol from local barley and wheat (please see below “Current Status/Ethanol Production” for estimates of grain use and the distillers’ grains produced).

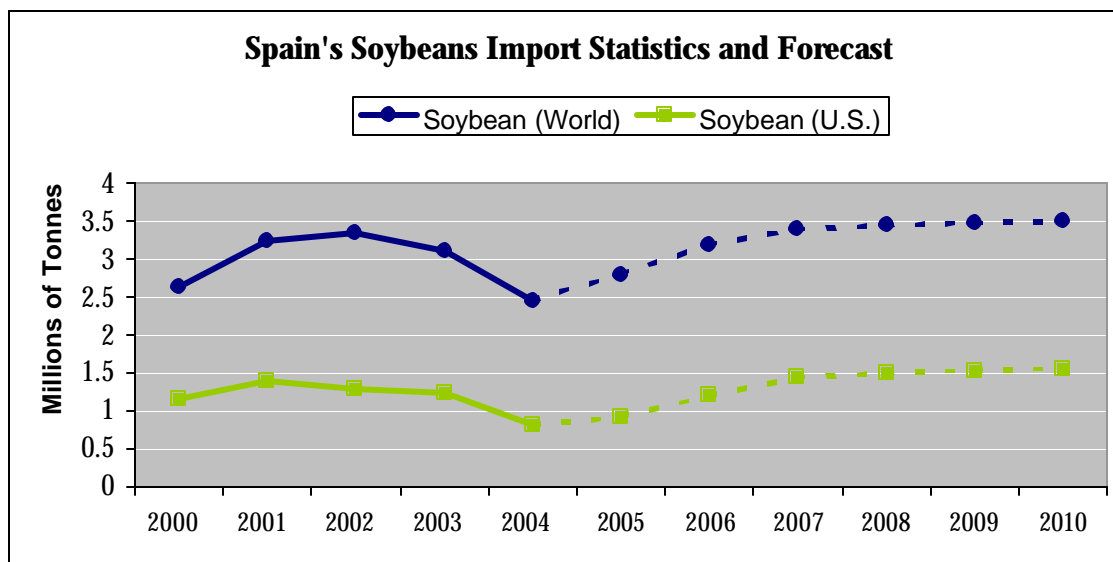
Common Agricultural Policy (CAP) reform, due to be implemented in 2006 in Spain, may lead to a reduction in wheat and barley production as domestic support is decoupled or partially decoupled from production. CAP reform and the EC biofuels initiative might then have led to greater imports of U.S. corn to offset the need for animal and ethanol feedstock, but with the defacto moratorium on biotechnology approvals, U.S. corn exporters still don’t have access to the Iberian Peninsula market. U.S. wheat and sorghum will continue to enter the Iberian Peninsula market, but only in small quantities to satisfy local demand for high-quality milling wheat and, in the case of sorghum, to help meet the feed compounders’ import needs to the extent that the EC provides for duty reduction.



Biodiesel:

The ability to use soybean oil, crushed from imported soybeans, in the production of biodiesel is important for local crushers looking for new oil markets. Local soybean crushers have recently been scrambling to find new markets for soy oil, because new EC traceability and labeling regulations require that all oil derived from biotechnology soybeans be labeled as being produced from “genetically modified soybeans.” For the most part, local food processors and food retailers are unwilling to buy or use biotechnology-derived products that would require labeling, so the possibility to use soy oil in biodiesel production is potentially good news. In this protein-deficit feed market, soybean meal is in demand, and to the extent that imported soybeans can be economically imported, crushed and the derived products sold into the domestic market, soy oil will be a potentially viable ingredient in biodiesel.

With the new outlet for soybean oil and the continued strong demand for protein meal, construction of new crushing plants collocated with petroleum plants, Iberian Peninsula imports of soybeans may return to levels seen in 2002.

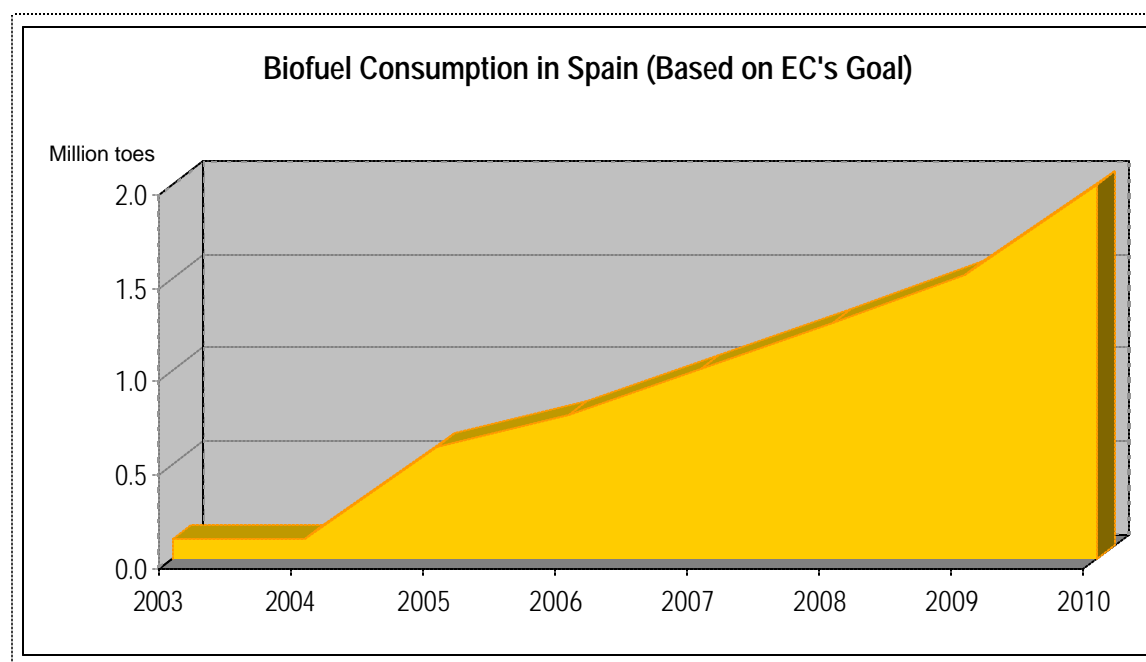


Current State of Play

Legislative:

Under Directive 2003/30/CE, Promotion and Use of Biofuels, each Member State should attempt to meet the EC's objectives, which lay out goals for biofuel use as previously noted. The Directive also requires that each Member State enact all legal and administrative regulations necessary to comply with its objectives, and formulate a report at the end of 2006 and every two subsequent years, which reviews the progress of biofuel integration. The report will reportedly assist in determining if any additional legislation is needed to promote the use of biofuels.

In Spain, the "Ley de Acompañamiento de los Presupuestos del Estado," issued on December 31, 2002, establishes that all biofuels introduced into fuels be exempted from the hydrocarbon tax. Spain's renewable fuels decree (1700/2003) sets the technical standards for biofuels, including a deviation from the EC directive in Article 7, Paragraph 3 regarding maximum iodine content (140 vs. 120 in the EU directive), which, as a result facilitates the use of soy oil in the production of biodiesel (Portugal has not yet established legislation for biofuel use).



In 2003, the use of biofuel in Spain was about 100 thousand tones of oil equivalent (ttoes); the EU Directive expects the consumption during 2005 to be 600 ttoes, and 2,000 ttoes by the year 2010. However, the Spanish Producers of Renewable Energy Association (APPA) predicts that by December 31, 2005, Spain will only be able to achieve, in the best case, a consumption level of 0.8 percent (250 ttoes). Plans are currently being discussed among APPA members, all of which are key producers, to propose additional incentives to help achieve the desired consumption goals.

Ethanol Production:

Abengoa Bioenergia, S.A. leads the ethanol market in Europe and Spain with two plants in operation, Ecocarburantes Espanoles and Bioetanol Galicia. Both plants have production capacities of 118 and 139 thousand tones (tmt) annually, respectively. In addition, Abengoa Bioenergia is developing a third plant in Salamanca with an annual capacity of 158 tmt. As a result, at the beginning of 2006, Spain will have a production capacity of 415 tmt. It is our understanding however, that the next ethanol plant is being planned for the corn growing region of France rather than the barley/wheat growing regions of Spain, which may be an indication of the relative potential for further ethanol production capacity development in Spain.

| <i>Ethanol Plants</i> | <i>Province</i> | <i>Capacity (tmt /year)</i> | <i>Beginning of Operations</i> |
|--|------------------------|------------------------------------|---------------------------------------|
| <i>Ecocarburantes Espanoles</i> | Murcia | 118 | 2000 |
| <i>Bioetanol Galicia</i> | A Coruna | 139 | 2002 |
| <i>Biocarb. Castilla y Leon</i> | Salamanca | 158 | Dec. 2005 |
| Total | | 415 | |

Source: APPA

For 2004, APPA estimates that the consumption of ethanol in Spain was 166 tmt, compared to an actual production of about 200 tmt—the rest was exported. For 2003, estimates are that 152 tmt of ethanol was consumed in Spain.

For the production of ethanol in Spain, wheat, barley, and waste from winery processing are used as the primary raw materials. In Salamanca, for example, the new plant will use barley as feedstock for about 85 percent of production and wine alcohol making up the difference. Currently, the abovementioned plants use just over 700 thousand tons of grains (wheat and barley) and produce about 250 thousand tons of distiller's grains. When the new plant in Salamanca comes on line, grain use will likely increase to about 1.5 million tons (all of the increase will reportedly be barley), with the production of about 500 thousand tons of distiller's grains.

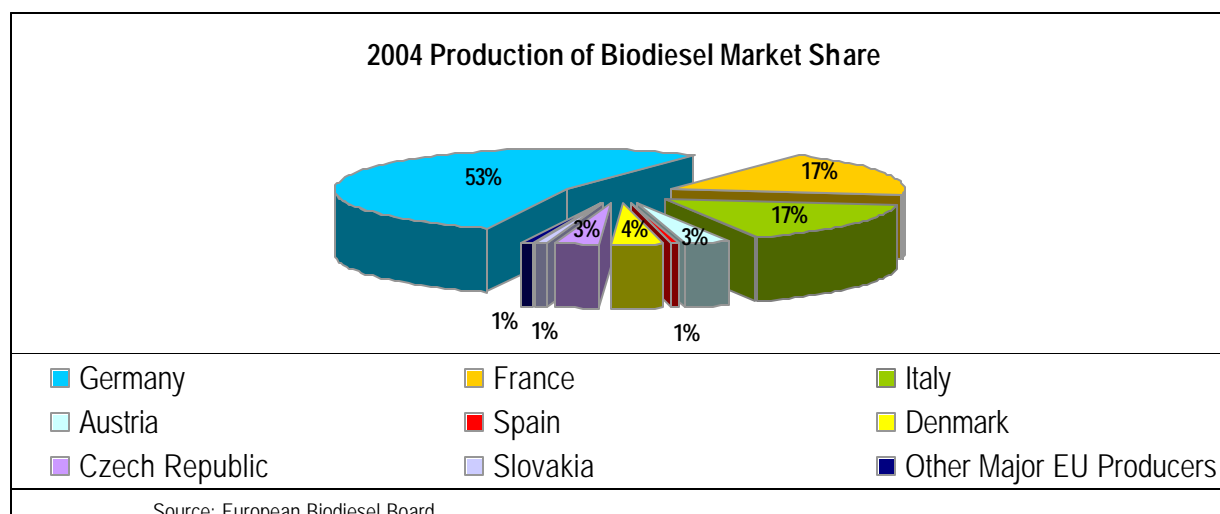
Corn is not used in the production of ethanol in Spain, nor is there any stated plan to begin using it in the near future. Barley and wheat are far more extensively grown in Spain, and thus more accessible for the production plants.

Biodiesel Production:

Spanish biodiesel production is relatively new, and nonexistent in Portugal. The first plant was commissioned in 2002, with a production capacity of 6 tmt per year. Presently, several biodiesel plants operate in Spain, and new plans are under development. This year, a total of six plants began or will begin operations. By 2006, the total production capacity will reach 322 tmt per year. We understand that a Portuguese company may introduce a plant just as soon as the appropriate legislation is promulgated.

| <i>Biodiesel Plants</i> | <i>Province</i> | <i>Capacity (tmt/Year)</i> | <i>Beginning of Operations</i> |
|-------------------------------------|------------------------|-----------------------------------|---------------------------------------|
| <i>Stocks del Valles</i> | Barcelona | 6 | 2002 |
| <i>Bionor Transformac.</i> | Alava | 30 | 2003 |
| <i>Bionet Europa</i> | Tarragona | 50 | 2004 |
| <i>IDEA</i> | Madrid | 5 | 2004 |
| <i>Biodiesel Castilla LM</i> | Toledo | 13 | January 2005 |
| <i>Biodiesel Caparroso</i> | Navarra | 35 | January 2005 |
| <i>Bionorte</i> | Asturias | 5 | May 2005 |
| <i>Biocarbur. Almaden</i> | Ciudad Real | 21 | Nov. 2005 |
| <i>Gebiosa</i> | Cantabria | 150 | Dec. 2005 |
| <i>Grup Ecologic Natural</i> | Baleares | 7 | 2005 |
| Total | | 322 | |

Even though biodiesel production in Spain is increasing, it only makes up a small percentage of all European production. Germany, France, and Italy are the leaders, with Germany's production making up more than half of all EU production.



It is also interesting to distinguish capacity and actual production. In 2004, for instance, it is reported that 14 tmt of biodiesel were produced in Spain, of which half was consumed nationally and the other half exported to other European countries. In contrast, production capacity was more than 90 tmt.

Biodiesel accessibility is still very limited in Spain and virtually nonexistent in Portugal. Of the 8,500 service stations in Spain, only about 100 sell biodiesel, of which, approximately 70 are supplied by one distributor. The availability may be low because major oil companies control the Spanish network of service stations, and they may not have decided yet to initiate biodiesel marketing in Spain.

Raw materials used for production vary depending on the plant size and location. Those with a smaller capacity exclusively recycle second-hand oil collected from restaurants, catering companies, schools, etc. The larger plants use newly refined and used vegetable oil. Unlike in the U.S., where the biodiesel is produced from soy oil, Spanish producers use mainly rapeseed oil, and to some extent sunflower seed oil. Palm oil and soybean oil use is still very limited, but increasing as a result of competitive prices, labeling and traceability, and the previously mentioned Spanish decree permitting higher iodine content in the biofuel.